

REMARKS

Claims 1-8 are currently pending in the application. By this amendment, the previously submitted amendment is withdrawn and claims 9-14 are added for the Examiner's consideration. The foregoing separate sheets marked as "Listing of Claims" shows all the claims in the application, with an indication of the current status of each .

The Examiner requires restriction between Group I, claims 1-2, drawn to a method and system for making prioritized recommendation of items to a user based on preferences, and Group II, claims 3-8, drawn to a method and system for collecting statistical data and pre-computing model parameters from the statistical data. Applicants hereby respectfully traverse the restriction requirement and elect Group II, claims 3-8.

Independent claims 1 and 3 each have three elements, as follows:

	Claim 1	Claim 3
Preamble	A method for making prioritized recommendations to a customer in the process of filling a market basket for purchase on an Internet commerce site, the method comprising the steps of:	
Element 1	generating a matrix of training data;	collecting statistics from training data;
Element 2	considering preferences based on associative and renewal buying history from the training data; and	precomputing model parameters from the collected statistics; and

	Claim 1	Claim 3
Element 3	making a prioritized recommendation of items so as to maximize the likelihood that the customer will add to the market basket those items with higher priorities.	recommending ordering for a given partial market basket based on the precomputed model parameters.

As will be seen from the above table, the preambles are identical. The first claim element refers to the training data used later for establishing preference weights. The second claim element uses the training data to establish preferences (claim 1) or model parameters (claim 3) for items not in the basket. And the third element provides for priority ordering of items based on the preferences/model parameters.

Contrary to the Examiner's argument, it does not appear that claims 1 and 3 are in the relation of combination/subcombination. Element 2 is broader in claim 3, but it is appropriate for the applicant to lay claim to the invention in a plurality of formulations and combinations. Therefore, there remain no grounds for sustaining the restriction requirement.

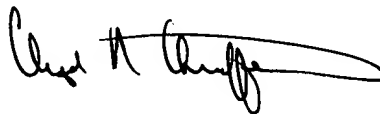
In response to the Examiner's one-month action, the preliminary amendment now adds a new independent claim 9 that is very similar to claim 3 but adds additional language to clarify that the precomputed model parameters concern the two preferences (as further detailed in claim 5). Further, dependent claims 10-14 have been added, patterned after claims 4-8. It is believed that new claim 9 and its dependent claims 10-14 are examinable within the elected group, and such examination is requested.

The restriction requirement has been traversed. Further, the current office action objecting to an amendment to claim 3 has prompted the applicant to add a new set of claims incorporating the amendment. It is not clear to the applicant why this additional response should have been necessary, since the results are substantially the same and the prior response – rejected by the Examiner – reached the same result more efficiently.

It is therefore respectfully requested that the restriction requirement be reconsidered, that withdrawn claims 1-2 be restored, and that examination proceed on claims 1-14.

Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account 50-0510 (IBM-Yorktown).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Clyde R Christofferson', with a long horizontal flourish extending to the right.

Clyde R Christofferson
Reg. No. 34,138

Whitham, Curtis & Christofferson, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190
703-787-9400
703-787-7557 (fax)

15 (vi) for each item $j \in \overline{\mathbf{B}}$, computing

16
$$\mathbf{P}(j \mid \text{asso}, \mathbf{B}) = \frac{\mathbf{P}'(j \mid \text{asso}, \mathbf{B})}{\sum_{k \in \overline{\mathbf{B}}} \mathbf{P}'(k \mid \text{asso}, \mathbf{B})};$$

17 (vii) for each item $j \in \overline{\mathbf{B}}$, computing

18
$$\mathbf{P}(j \mid \mathbf{B}) = \mathbf{P}(j \mid \text{asso}, \mathbf{B})\mathbf{P}(\text{asso} \mid \mathbf{B}) + \mathbf{P}(j \mid \text{renewal}, \mathbf{B})\mathbf{P}(\text{renewal} \mid \mathbf{B});$$

19 and

20 (viii) sorting items in order of decreasing $\mathbf{P}(j \mid \mathbf{B})$ and returning this
21 as an item preference ordering.

1 13. (new) The method of claim 12, wherein the step of sorting comprises the
2 step of using a final probability obtained for each item, $\mathbf{P}(j \mid \mathbf{B})$, of a customer
3 buying the item to maximize profit by recommendation.

1 14. (new) The method of claim 13, wherein the step of using a final
2 probability of an item to maximize profit comprises the steps of:
3 assigning a profit amount, $\$j$, to each item;
4 computing $\mathbf{P}(j \mid \mathbf{B})\j for each item; and
5 ranking recommendations based on the computation of $\mathbf{P}(j \mid \mathbf{B})\j for
6 each item.
